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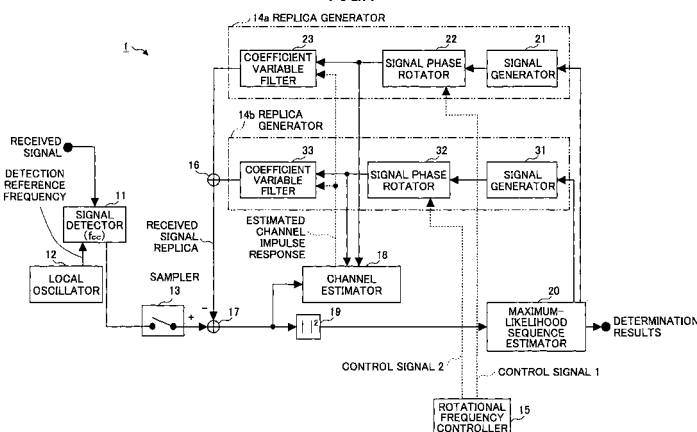
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(54) **Signal reception device, signal transmission device, radio communication system, and signal reception method**

(57) A signal reception device is disclosed that is able to improve interference cancellation capabilities even when signals having different center frequencies exist on the same frequency band. The signal reception device includes an interference suppression unit to generate replicas of plural signals in the received signal and separate the signals by suppressing interference signals. The interference suppression unit includes a signal

phase rotator to rotate phases of the signal candidates at preset respective rotational frequencies, the preset rotational frequencies being related to respective center frequencies of the signals in the received signal; a rotational frequency controller to set the preset rotational frequencies; and a replica generator to generate the replicas of the signals by using the phase-rotated signal candidates.

FIG.1





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EUROPEAN SEARCH REPORT

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EP 05 25 2513

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Place of search Munich		Date of completion of the search 15 April 2008	Examiner Avilés Martínez, L
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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